Greatest Of All Times

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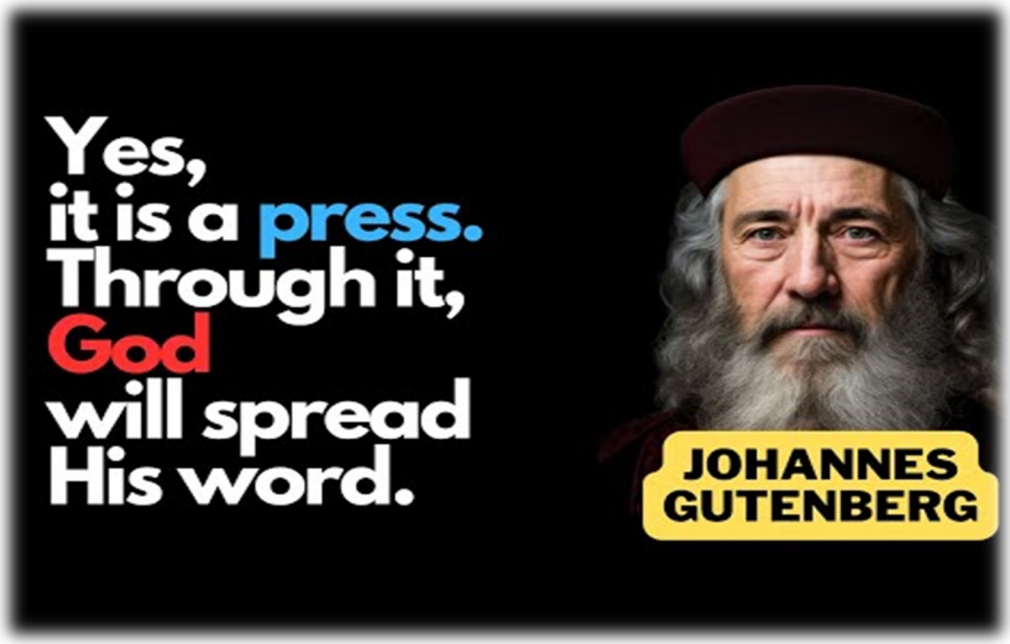
Globally selected

PERSONALITIES



c. 1394 -1404 <::><::><::> 3 Feb 1468

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ISBN:978-81-982668-0-4

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[An ISO 9001 - 2015 Certified]
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c. 1393

3 Feb 1468

https://en.wikipedia.org/wiki/Johannes_Gutenberg

Johannes Gutenberg

Posthumous portrait of Gutenberg. No contemporary depictions survive.[1]

Born	Johannes Gensfleisch zur Laden zum Gutenberg c. 1393–1406 Mainz, Free City of Mainz, Holy Roman Empire
Died	3 February 1468 Mainz, Free City of Mainz, Holy Roman Empire
Occupations	• Inventor • craftsman
Known for	Inventing the printing press Introducing movable type to Europe

Johannes Gensfleisch zur Laden zum Gutenberg (c. 1393–1406 – 3 February 1468) was a German inventor and craftsman who invented the movable-type printing press. Though movable type was already in use in East Asia, Gutenberg's invention of the printing press enabled a much faster rate of printing. The printing press later spread across the world, and led to an information revolution and the

unprecedented mass-spread of literature throughout Europe. It had a profound impact on the development of the Renaissance, Reformation, and humanist movements.

His many contributions to printing include the invention of a process for mass-producing movable type; the use of oil-based ink for printing books;[4] adjustable molds; mechanical movable type; and the invention of a wooden printing press similar to the agricultural screw presses of the period.[6] Gutenberg's method for making type is traditionally considered to have included a type metal alloy and a hand mould for casting type. The alloy was a mixture of lead, tin, and antimony that melted at a relatively low temperature for faster and more economical casting, cast well, and created a durable type. His major work, the Gutenberg Bible, was the first printed version of the Bible and has been acclaimed for its high aesthetic and technical quality.

Gutenberg is often cited as among the most influential figures in human history and has been commemorated around the world. To celebrate the 500th anniversary of his birth in 1900, the Gutenberg Museum was founded in his hometown of Mainz. In 1997, Time Life picked Gutenberg's invention as the most important of the second millennium.

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Printing of the Bible of Johannes Gutenberg

https://www.britannica.com/topic/Gutenberg-Bible

Gutenberg BibleTwo-page spread of the Book of Ecclesiastes from Johannes Gutenberg's 42-line Bible, c. 1450–55.

There is no reason to doubt that the printing of certain books (*2reck der bucher*, specifically mentioned in the record of the trial, refers to the Forty-two-Line Bible that was Gutenberg's masterpiece) was completed, according to Gutenberg's major biographers, in 1455 at the latest. It has been estimated that the sale of the Forty-two-Line Bible alone would have produced many times over the sum owed Fust by Gutenberg, and there exists no explanation as to why these tangible assets were not counted among Gutenberg's property at the trial.

After winning his suit, Fust gained control of the type for the Bible and for Gutenberg's second masterpiece, a Psalter, and at least some of Gutenberg's other printing equipment. He continued to print, using Gutenberg's materials, with the assistance of Peter Schöffer, his son-in-law, who had been Gutenberg's most skilled employee and a witness against him in the 1455 trial. The first printed book in Europe to bear the name of its printer is a magnificent Psalter completed in Mainz on August 14, 1457, which lists Johann Fust and Peter Schöffer.

The Psalter is decorated with hundreds of two-colour initial letters and delicate scroll borders that were printed in a most ingenious technique based on multiple inking on a single metal block. Most experts are agreed that it would have been impossible for Fust and Schöffer alone to have invented and execute the intricate technical equipment necessary to execute this process between November 6, 1455, when Gutenberg lost control of his printing establishment, and August 14, 1457, when the Psalter appeared. It was Gutenberg's genius that was responsible for the Psalter decorations. In the 1960s it was suggested that he may also have had a hand in the creation of copper engraving, in which he may have recognized a method for producing pictorial matrices from which to cast reliefs that could be set with the type, initial letters, and calligraphic scrolls. It is at present no more than a hypothesis, but Gutenberg's absorption in both copper engraving and the Psalter decorations would certainly have increased Johann Fust's impatience and vindictiveness.

A number of other printings used to be attributed to Gutenberg. However, subsequent research raised the possibility that they were actually the work of other minor printers; among these is a Thirty-six-Line Bible printed in Bamberg, a typographic resetting of the Forty-two-Line Bible. Attributed to Gutenberg himself is a *Türkenkalender*, a warning against the impending danger of Turkish invasion after the fall of Constantinople in 1453, printed December 1454 for 1455 use, some letters of indulgence, and some school grammars. The identity of the printer of a *Missale Speciale Constantiense* is still not established, but it was probably produced about 1473 in Basel, Switzerland.

In January 1465 the archbishop of Mainz pensioned Gutenberg, giving him an annual measure of grain, wine, and clothing and exempting him from certain taxes. His financial status in his last years has been debated but was probably not destitute.

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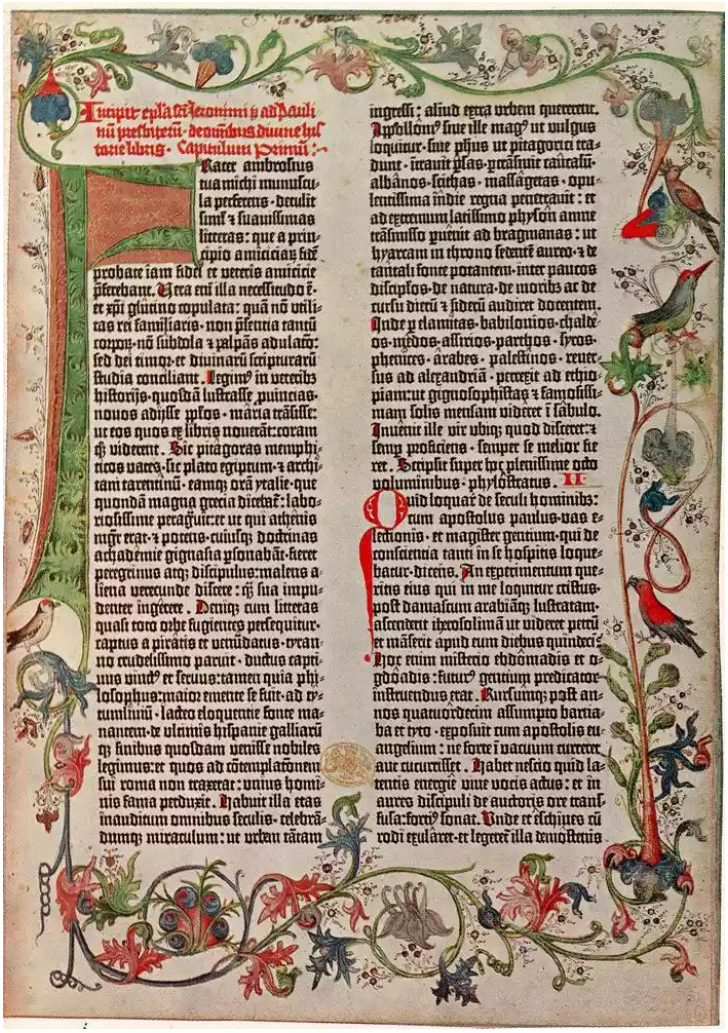
https://www.britannica.com/topic/Gutenberg-Bible

Gutenberg Bible

Gutenberg Bible, the first complete book extant in the West and one of the earliest printed from movable type, so called after its printer, Johannes Gutenberg, who completed it about 1455 working at Mainz, Germany. The three-volume work, in Latin text, was printed in 42-line columns and, in its later stages of production, was worked on by six compositors simultaneously. It is sometimes referred to as the Mazarin Bible because the first copy described by bibliographers was located in the Paris library of Cardinal Mazarin. *The Anthology of Great Buddhist Priests' Zen Teachings* (1377), also known as *Jikji*, was printed in Korea 78 years before the Gutenberg Bible and is recognized as the world's oldest extant movable metal type book.



First page of the 42-line bible, the Gutenberg Bible, printed at Mainz.

Gutenberg's Bibles were limited to only 42 lines per page by the size of the font, which while large, also made the text extremely easy to read. This ease of readability proved especially popular among the church clergy. In a letter written in March 1455, the future Pope Pius II recommended Gutenberg's Bibles to Cardinal Carvajal, stating, "The script was very neat and legible, not at all difficult to follow—your grace would be able to read it without effort, and indeed without glasses."

Unfortunately, Gutenberg didn't get to enjoy his innovation for long. In 1456, his financial backer and partner Johann Fust accused Gutenberg of misusing the money he had loaned him in 1450 and demanded repayment. At 6% interest, the 1,600 guilders Gutenberg had borrowed now amounted to 2,026 guilders. When Gutenberg refused or was unable to repay the loan, Fust sued him in the archbishop's court. When the court ruled against Gutenberg, Fust was allowed to seize the printing press as collateral. The bulk of Gutenberg's presses and type pieces went to his employee and Fust's future son-in-law, Peter Schöffer. Fust continued printing the Gutenberg 42-line Bibles, eventually publishing about 200 copies, of which only 22 exist today.

The first volume of the first edition Latin Vulgate translation of the Bible, including books Genesis - Psalms. Volume two is missing. This copy is one of the three existing copies printed, illuminated, and bound in Mainz, Germany, circa 1455, by Johannes Gutenberg (1400-1468). A paper copy of 324 leaves or 628 pages weighs 7.2 kilograms. This Gutenberg Bible Old Testament sold at auction in 1987 for $4,900,000.

Virtually bankrupt, Gutenberg is believed to have started a smaller printing shop in the town of Bamberg around 1459. In addition to the 42-line Bible, Gutenberg is credited by some historians with a Book of Psalter, published by Fust and Schöffer but using new fonts and innovative techniques generally attributed to Gutenberg. The oldest surviving manuscript from the early Gutenberg press is that of a fragment of the poem "The Sibyl's Prophecy," which was made using Gutenberg's earliest typeface between 1452 and 1453. The page, which includes a planetary table for astrologers, was found in the late 19th century and donated to the Gutenberg Museum in Mainz in 1903.

Like other contemporary works, the Gutenberg Bible had no title page, no page numbers, and no innovations to distinguish it from the work of a manuscript copyist. This was presumably the desire of both Gutenberg and his customers. Experts are generally agreed that the Bible, though uneconomic in its use of space, displays a technical efficiency not substantially improved upon before the 19th century. The Gothic type is majestic in appearance, medieval in feeling, and slightly less compressed and less pointed than other examples that appeared shortly thereafter.

The original number of copies of this work is unknown; some 40 are still in existence. There are perfect vellum copies in the U.S. Library of Congress, the French Bibliothèque Nationale, and the British Library. In the United States almost complete texts are in the Huntington, Morgan, New York Public, Harvard University, and Yale University libraries.

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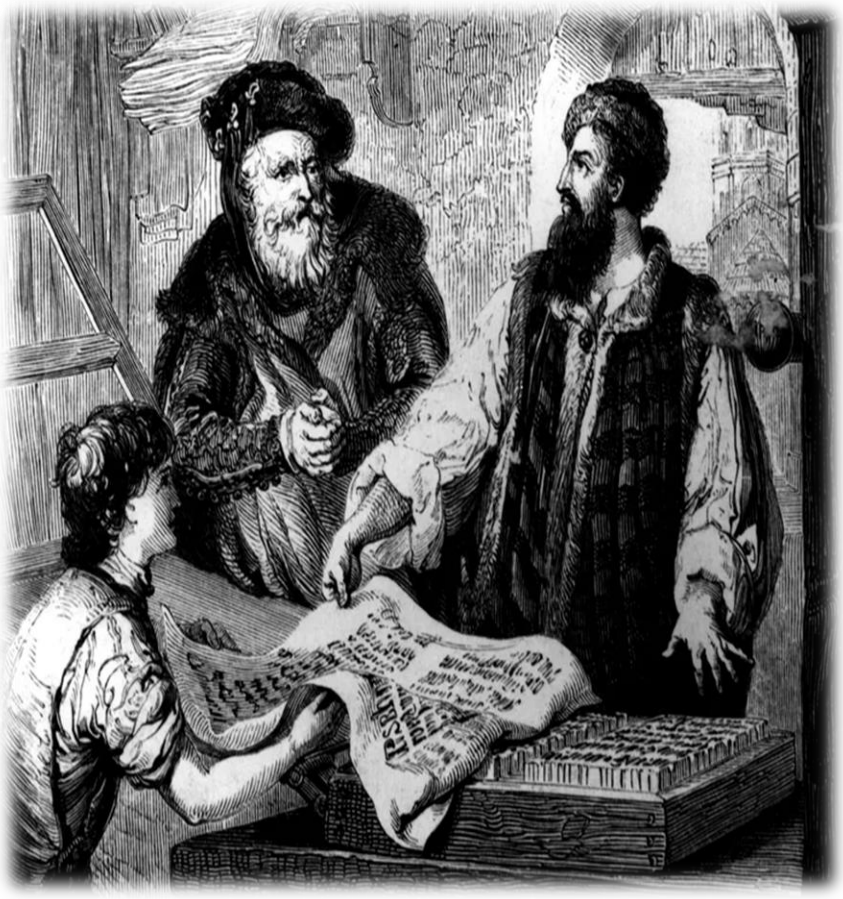
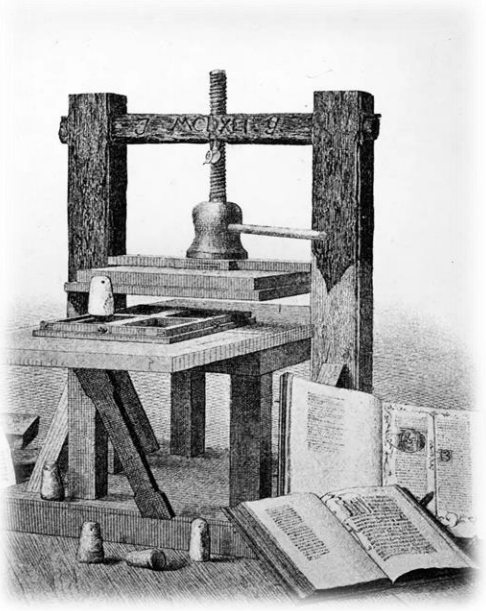
Fast Facts: Johannes Gutenberg

- **Known For:** Inventing the moveable type printing press
- **Born:** c. 1394–1404 in Mainz, Germany
- **Parents:** Friele Gensfleisch zur Laden and Else Wirich
- **Died:** February 3, 1468, in Mainz, Germany
- **Education:** Apprentice to a goldsmith, may have enrolled at the University of Erfurt
- **Published Works:** Printed the 42-Line Bible ("The Gutenberg Bible"), Book of Psalter, and "Sibyl's Prophecy"
- **Spouse:** None known
- **Children:** None known



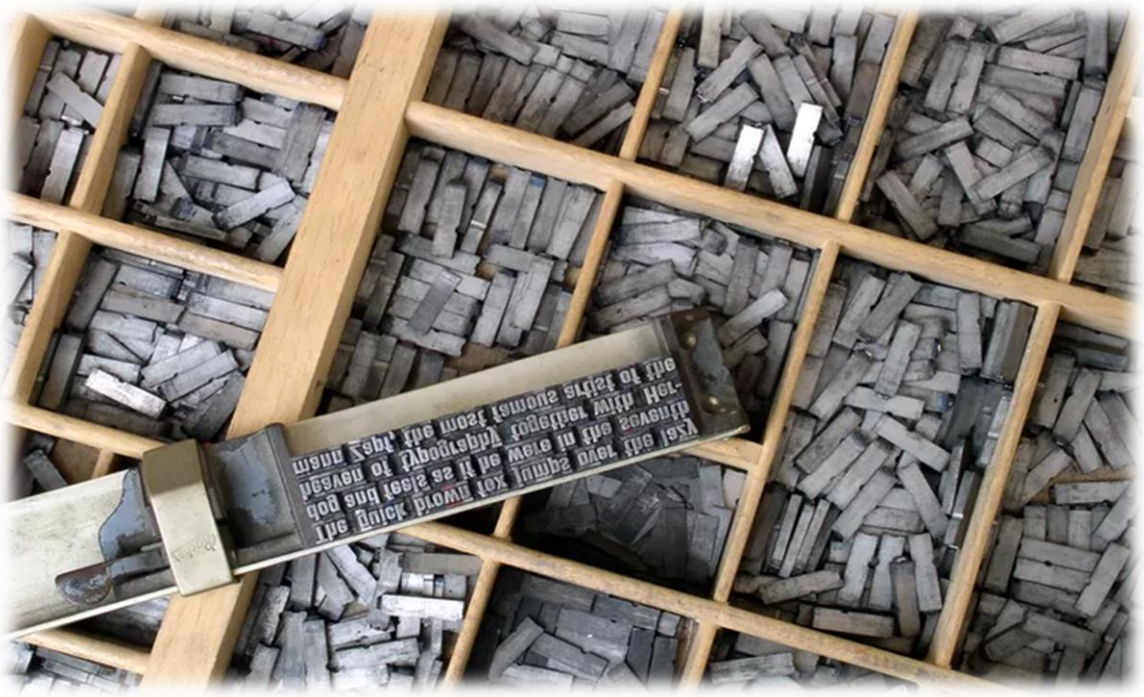
German printing pioneer Johannes Gutenberg with his partner Johann Fust, a merchant, with the first proof from moveable types on the press they set up together, circa 1455.



Engraving of the first printing press, invented by Johannes Gutenberg.

Movable Type

While printers had been using movable type made of ceramic or wood blocks for centuries, Gutenberg is generally credited with the invention of practical movable metal type printing. Instead of individually hand-carved blocks of wood, Gutenberg made metal molds of each letter or symbol into which he could pour molten metal, such as copper or lead. The resulting metal "slug" letters were more consistent and durable than wooden blocks and produced more easily readable print. Great quantities of each molded metal letter could be produced far more quickly than carved wood letters. The printer could thus arrange and rearrange the individual metal letter slugs as often as needed to print several different pages using the same letters.



Movable metal type descended from Gutenberg's press.

For most books, setting up individual pages for printing with movable metal type proved far faster and economical than woodblock printing. The high quality and relative affordability of the Gutenberg Bible introduced movable metal type to Europe and established it as the preferred method of printing.

Books and Printing Before Johannes Gutenberg

The world-changing impact of Gutenberg's press is best understood when viewed in the context of the state of books and printing before his time.

Although historians can't pinpoint when the first book was created, the oldest known book in existence was printed in China in 868 CE. Called "The Diamond Sutra," it was a copy of a sacred Buddhist text, in a 17-foot-long scroll printed with wooden blocks. It was commissioned by a man named Wang Jie to honor his parents, according to an inscription on the scroll, though little else is known about who Wang was or who created the scroll. Today, it is in the collection of the British Museum in London.

By 932 CE, Chinese printers regularly were using carved wooden blocks to print scrolls. But these wooden blocks wore out quickly, and a new block had to be carved for each character, word, or image that was used. The next revolution in printing occurred in 1041 when Chinese printers began using movable type, individual characters made of clay that could be chained together to form words and sentences.

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The Johannes Gutenberg monument on the southern Rossmarkt (1854 - 1858)
by sculptor Eduard Schmidt von der Launitz in Frankfurt, Germany.
Johannes Gutenberg was the inventor of book printing.
The monument was inaugurated in 1840.

A museum employee shows how a Johannes Gutenberg replica printing press is used at the "Book of Books" exhibition in the Bible Lands Museum on October 23, 2013 in Jerusalem, Israel.

Celebration medal by Friedrich Anton König in 1840, the 400th anniversary of Johannes Gutenberg's printing press invention, obverse

The reverse of the medal: Johannes Gutenberg in his workshop, sitting in front of his printing press

Legacy

Influence

"What the world is today, good and bad, it owes to Gutenberg. Everything can be traced to this source, but we are bound to bring him homage, … for the bad that his colossal invention has brought about is overshadowed a thousand times by the good with which mankind has been favoured."

‹‹‹ American writer Mark Twain (1835–1910)

Gutenberg's invention had an enormous impact on subsequent human history, both on cultural and social matters. His design directly impacted the mass spread of books across Europe, causing an information revolution. As a result, Venzke describes the inauguration of the Renaissance, Reformation and humanist movement as "unthinkable" without Gutenberg's influence. Described as "one of the most recognized names in the world", a team of US journalists voted Gutenberg as the "man of the millennium" in 1999. Similarly, in 1999 the A&E Network ranked Gutenberg the No. 1 most influential person of the second millennium on their "Biographies of the Millennium" countdown, while *Time–Life* magazine picked Gutenberg's invention as the most important of the second millennium in 1997. The scholar of paper history, Thomas Francis Carter, drew parallels between Cai Lun, the traditional inventor of paper during the Eastern Han dynasty, and Gutenberg, calling them "spiritual father and son" respectively. In his 1978 book, *The 100: A Ranking of the Most Influential Persons in History*, Michael H. Hart ranked him 8th, below Cai but above figures such as Christopher Columbus, Albert Einstein and Charles Darwin.

The capital of printing in Europe shifted to Venice, where printers like Aldus Manutius ensured widespread availability of the major Greek and Latin texts. The claims of an Italian origin for movable type have focused on this rapid rise of Italy in movable-type printing. This may perhaps be explained by the prior eminence of Italy in the paper and printing trade. Italy's economy was growing rapidly at the time, facilitating the spread of literacy. Christopher Columbus had a geography book printed with movable type, bought by his father; it is now in the Biblioteca Colombina in Seville. Finally, the city of Mainz was sacked in 1462, driving many printers into exile.

"Modern Book Printing" –
A Berlin sculpture commemorating its inventor Gutenberg

Printing was also a factor in the Reformation. Martin Luther's *Ninety-five Theses* were printed and circulated widely; subsequently he issued broadsheets outlining his anti-indulgences position (certificates of indulgences were one of the first items Gutenberg had printed). Due to this, Gutenberg would also be viewed as a proto-Protestant. The broadsheet contributed to the development of the newspaper.

Memorials and monuments

There are many statues of Gutenberg in Germany, including one by Bertel Thorvaldsen (1837) at Gutenbergplatz in Mainz, home to the eponymous Johannes Gutenberg University of Mainz and Gutenberg Museum on the history of early printing. The latter publishes the *Gutenberg-Jahrbuch*, the leading periodical in the history of printing, and the book.

In 1952, the United States Postal Service issued a five hundredth anniversary stamp commemorating Johannes Gutenberg invention of the movable-type printing press. In space, he is commemorated in the name of the asteroid 777 Gutemberga. Two operas based on Gutenberg are *G, Being the Confession and Last Testament of Johannes Gensfleisch, also known as Gutenberg, Master Printer, formerly of Strasbourg and Mainz*, from 2001, with music by Gavin Bryars; and *La Nuit de Gutenberg*, with music by Philippe Manoury, premiered in 2011 in Strasbourg. Project Gutenberg, the oldest digital library, commemorates Gutenberg's name. The Mainz Johannisnacht (St. John's Night), has commemorated Gutenberg in his native city since 1968.

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Global Spread of the Printing Press

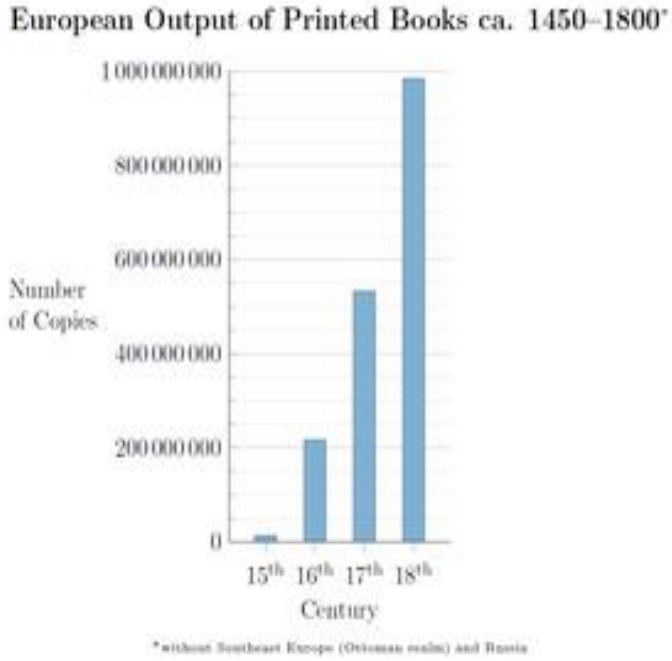
https://en.wikipedia.org/wiki/Global_spread_of_the_printing_press

The **global spread of the printing press** began with the invention of the printing press with movable type by Johannes Gutenberg in Mainz, Germany c. 1439.

Western printing technology was adopted in all world regions by the end of the 19th century, displacing the manuscript and block printing.

In the Western world, the operation of a press became synonymous with the enterprise of publishing and lent its name to a new branch of media, the "press" (see List of the oldest newspapers).

Spread of printing in Europe in the 15th century.



European output of printed books from the 15th through the 18th century.

Spread of the Gutenberg press

Germany

Modern stamp commemorating the Gutenberg Bible, the first major European work printed by mechanical movable type

Gutenberg's first major print work was the 42-line Bible in Latin, printed probably between 1452 and 1454 in the German city of Mainz. After Gutenberg lost a lawsuit against his investor, Johann Fust, Fust put Gutenberg's employee Peter Schöffer in charge of the print shop. Thereupon Gutenberg established a new one with the financial backing of another money lender. With Gutenberg's monopoly revoked, and the

technology no longer secret, printing spread throughout Germany and beyond, diffused first by emigrating German printers, but soon also by foreign apprentices.

Europe

In rapid succession, printing presses were set up in Central and Western Europe. Major towns, in particular, functioned as centers of diffusion (Cologne 1466, Rome 1467, Venice 1469, Paris 1470, Buda 1473, Kraków 1473, London 1477). In 1481, barely 30 years after the publication of the 42-line Bible, the small Netherlands already featured printing shops in 21 cities and towns, while Italy and Germany each had shops in about 40 towns at that time. According to one estimate, "by 1500, 1000 printing presses were in operation throughout Western Europe and had produced 8 million books" and during the 1550s there were "three hundred or more" printers and booksellers in Geneva alone. The output was in the order of twenty million volumes and rose in the sixteenth century tenfold to between 150 and 200 million copies. Germany and Italy were considered the two main centres of printing in terms of quantity and quality.

Rest of the world

The near-simultaneous discovery of sea routes to the West (Christopher Columbus, 1492) and East (Vasco da Gama, 1498) and the subsequent establishment of trade links greatly facilitated the global spread of Gutenberg-style printing. Traders, colonists, but perhaps most importantly, missionaries exported printing presses to the new European oversea domains, setting up new print shops and distributing printing material. In the Americas, the first extra-European print shop was founded in Mexico City in 1544 (1539?), and soon after Jesuits started operating the first printing press in Asia (Goa, 1556).

According to Suraiya Faroqhi, lack of interest and religious reasons were among the reasons for the slow adoption of the printing press outside Europe: Thus, printing in the Arabic script, after encountering strong opposition by Muslim legal scholars and manuscript scribes, remained formally or informally prohibited in the Ottoman Empire between 1483 and 1729, according to some sources even on penalty of death, while some movable Arabic type printing was done by Pope Julius II (1503–1512) for distribution among Middle Eastern Christians, and the oldest Qur'an printed with movable type was produced in Venice in 1537/1538 for the Ottoman market.

Hebrew texts and presses were imported across the Middle East - as early as 1493 - Constantinople, Fez (1516), Cairo (1557) and Safed (1577). Disquiet among Muslims regarding the publication of religious texts in this way may have dampened down their production.

In India, reports are that Jesuits "presented a polyglot Bible to the Emperor Akbar in 1580 but did not succeed in arousing much curiosity." But also practical reasons seem to have played a role. The English East India Company, for example, brought a printer to Surat in 1675, but was not able to cast type in Indian scripts, so the venture failed.

North America saw the adoption by the Cherokee Indian Elias Boudinot who published the tribe's first newspaper, the *Cherokee Phoenix*, from 1828, partly in the Cherokee language, using the Cherokee script recently invented by his compatriot Sequoyah.

In the 19th century, the arrival of the Gutenberg-style press to the shores of Tahiti (1818), Hawaii (1821) and other Pacific islands, marked the end of a global diffusion process which had begun almost 400 years earlier. At the same time, the "old

style" press (as the Gutenberg model came to be termed in the 19th century), was already in the process of being displaced by industrial machines like the steam powered press (1812) and the rotary press (1833), which radically departed from Gutenberg's design, but were still of the same development line.

Dates by location

The following represents a selection:

Germany, Austria and German printers in Central Europe

Date	City	Printer	Comment
1452–53	Mainz	Johannes Gutenberg, Peter Schöffer, Johann Fust (investor)	Gutenberg Bible
~1457	Bamberg	Albrecht Pfister, Johann Sensenschmid (from 1480)	Pfister: first woodcut book illustration c. 1461
1460	Strassburg	Johannes Mentelin, Johann Grüninger (1482)	In 1605, Johann Carolus publishes the German *Relation aller Fuernemmen und gedenckwuerdigen Historien* (Collection of all distinguished and commemorable news), recognized by the World Association of Newspapers as the first newspaper.
~1465	Cologne	Ulrich Zell, Busaus, Gymnici, Mylij, Quentell	
1468	Augsburg	Günther Zainer	
Not later than 1469	Nuremberg	Johann Sensenschmidt, Johannes Regiomontanus (1472–75), Anton Koberger (1473–1513) Johann Endter (1625-1670)	Nuremberg Chronicle
~1471	Speyer		
~1472	Lauingen		

1473	Esslingen am Neckar		
1473	Merseburg		
1473	Ulm		
~1473–74	Erfurt		
~1474	Lübeck		1488, Missale Aboense and other versions, first books for the Scandinavian and Finnish markets, by Bartholomeus Ghotan
1475	Breslau (now Wrocław)	Kasper Elyan of Glogau	Kasper's print shop remained operational until 1483 with an overall output of 11 titles.[21]
1475	Trento		
~147	Blaubeuren		
~1475	Rostock		
1476	Reutlingen		
~1478–79	Memmingen	Albrecht Kunne [de]	
1479	Würzburg	Georg Reyser	
1479	Magdeburg		
1480	Passau		
1480	Leipzig	Konrad Kachelofen [de], Andreas Friesner	
~1480	Eichstätt		

1482	Vienna	Johann Winterburger[20]	
1482	Munich	Johann Schauer	
~1482	Heidelberg[20]		
1484	Ingolstadt		
1485	Münster		
~1485	Regensburg		
1486	Schleswig	Stephan Arndes	
~1486	Stuttgart		
~1488	Hamburg		
1489	Hagenau		
1491	Freiburg		
1492	Marienburg	Jakob Karweyse	Only two editions printed[25]

Rest of Europe

Italy

Date	City	Printer	Comment
1465	Subiaco	Arnold Pannartz, Konrad Sweynheym	
1467	Rome	Ulrich Hahn, Arnold Pannartz, Konrad Sweynheym (from 1467)	
1469	Venice	Johann von Speyer, shortly afterwards Nikolaus	Johann was granted a privilege for 5 years for movable type printing by the Senate, but died soon after. In 1501, Ottaviano

		Jenson from Tours, Aldus Manutius	Petrucci produced the first book of sheet music printed from movable type.
1470	Milan	Filippo de Lavagna, Antonio Zaroto, shortly afterwards Waldarfer von Regensburg	
1470	Naples		
1471	Florence	Demetrius Damilas	Earliest printing in Greek
1471	Genoa		
1471	Ferrara		
1471	Bologna		Probably in 1477, claimed to have the first engraved illustrations, although the 1476 Boccaccio edition by Colard Mansion in Bruges already had copper engravings
1471	Padua		
1471	Treviso		
1472	Parma		
1473	Pavia		
1473	Brescia		
~1473–74	Modena		
1483	Soncino	Israel Nathan ben Samuel and Soncino Family	
1484	Siena		

In the 15th century, printing presses were established in 77 Italian cities and towns. At the end of the following century, 151 locations in Italy had seen at one time printing activities, of which 130 (86%) were north of Rome. During these two centuries a total of 2894 printers were active in Italy, with only 216 of them located in southern Italy. Ca. 60% of the Italian printing shops were situated

in six cities (Venice, Rome, Milan, Naples, Bologna and Florence), with the concentration of printers in Venice being particularly high (ca. 30%).

Switzerland

Date	City	Printer	Comment
~1468	Basel	Berthold Ruppel	
1470	Beromünster	Helias Helye [de]	
~1474	Burgdorf[20]		
1478	Geneva	Adam Steinschaber	
~1479	Zürich		
1577	Schaffhausen		
1577	St. Gallen		
1585	Fribourg		
1664	Einsiedeln		

France

Date	City	Printer	Comment
1470	Paris	Ulrich Gering, Martin Crantz, Michael Friburger	
1473	Lyon	Guillaume Le Roy Buyer	
~1475	Toulouse		
1476–77	Angers		
~1477–78	Vienne		
1478–79	Chablis		

1479	Poitiers		
1480	Caen		
1480–82	Rouen		
1483	Troyes		
1484–85	Rennes		
1486	Abbeville		
~1486–88	Besançon		
1490–91	Orléans		
1491	Dijon		
1491	Angoulême		
1493	Nantes		
1493–94	Tours		
1495–96	Limoges		
1497	Avignon		
1500	Perpignan		

Apart from the cities above, a small number of lesser towns also set up printing presses.

Spain

[Date	City	Printer	Comment
1471-1472	Segovia	Johannes Parix	
~1472-74	Seville		

~1472-1473	Barcelona	Heinrich Botel, Georgius vom Holtz, Johannes Planck	
~1472–73	Valencia	Lambert Palmart, Jakob Vinzlant	
1475	Zaragoza	Matthias Flander, Paul Hurus	
~1480	Salamanca		
1485	Burgos		
1486	Toledo		
1496	Granada	Meinrad Ungut, Hans Pegnitzer	
1499	Montserrat		Oldest publishing house in the world still running
1500	Madrid		

Belgium

Date	City	Printer	Comment
1473	Aalst	Dirk Martens	
1473–74	Leuven	Johann von Westphalen	
~1473–74	Bruges	Colard Mansion	Worked with, and (?) trained William Caxton, printing the first books in English (*Recuyell of the Historyes of Troye*) and also French, as well as the first book to use engravings for illustrations.
1475–76	Brussels		
1480	Oudenaarde	Arend De Keysere	
1481	Antwerp	Matt. Van der Goes	

1483	Ghent	Arend De Keysere	

Netherlands

Date	City	Printer	Comment
1473[1]	Utrecht		
1477	Gouda	Gerard Leeu	
1477	Deventer	Richard Paffroad	
1477	Zwolle		
1477	Delft	Jacob Jacobzoon	
1483[1]	Haarlem	Jacob Bellaert	

In 1481, printing was already being done in 21 towns and cities.

Hungary

Date	City	Printer	Comment
1472	Buda (now Budapest)	Andreas Hess?	The first work printed on Hungarian soil was the Latin history book *Chronica Hungarorum* published on 5 June 1472.

In the 16th century, a total of 20 print shops were active in 30 different places in Hungary, as some of them were moving several times due to political instability.

Poland

Date	City	Printer	Comment
1473	Kraków	Kasper Straube	The oldest printed work in Poland is the Latin *Calendarium cracoviense* (Cracovian Calendar), a single-sheet astronomical almanac for the year 1474. Although Straube continued to published in Kraków until 1477, printing became permanently established in Kraków, and Poland, only after 1503. In 1491, the first book in Cyrillic script was published by Schweipolt Fiol from Franconia. In 1513, Florian Ungler printed *Hortulus Animae*, the first book in the Polish language.

1499	Danzig	Franz Rhode	1538: *Wisby'sches Waterrecht*, 1540: Narratio Prima
1580	Warsaw		
1593	Lwów	Matthias Bernhart	

In the 15th and 16th centuries printing presses were also established in Poznań, Lwów, Brześć Litewski and Vilnius.

Czech Republic

Date	City	Printer	Comment
~1475–76	Plzeň	Mikuláš Bakalář (name known since 1488)	*Statuta Ernesti* (1476, Latin), *The New Testament* (1476, two editions in Czech), *Passionale*, *The Chronicle of Troy* (c. 1476, Czech)
1486	Brno	Conradus Stahel, Matthias Preinlein	*Agenda Olomucensis* 1486 and further 20, partly small prints in Latin until 1488.
1487	Prague		*The Chronicle of Troy* 1487, *Psalter* 1487, *The Bible* 1488 (all in Czech); since 1512 printing in Hebrew, since 1517 in Cyrillic, too.
1489	Kutná Hora	Martin z Tišnova	*The Bible* (in Czech)

England

Date	City	Printer	Comment
1476	Westminster	William Caxton	The first dated prints in England are an indulgence dating to 13 December 1476 (date written in by hand), and the *Dicts or Sayings*, completed on 18 November 1477. Between 1472 and 1476, Caxton had already published several English works on the continent (see Bruges above).
1478	Oxford	Theoderic Rood	
~1479	St Albans	'Schoolmaster'; John Haule	The St Albans Press produced eight known prints including *The Chronicles of England*.

1480	London	John Lettou, William Machlinia, Wynkyn de Worde	

Denmark

Date	City	Printer	Comment
1482	Odense	Johann Snell	Snell was the first to introduce printing both in Denmark and Sweden.
1493	Copenhagen	Gottfried von Ghemen	Von Ghemen published in Copenhagen from 1493 to 1495 and from 1505 to 1510. In the meantime, he was active in the Dutch town of Leiden. For 200 years, official policy confined printing in Denmark largely to Copenhagen.

Sweden

[Date	City	Printer	Comment
1483	Stockholm	Johann Snell	Snell published the *Dialogus creaturarum* on Riddarholmen island in Stockholm on December 20, 1483.
Before 1495	Vadstena		
1510	Uppsala		

Portugal

Date	City	Printer	Comment
1487	Faro	Samuel Gacon (also called *Porteiro*)	The country's first printed book was the Hebrew *Pentateuch*, the Faro Pentateuch published by the Jew Samuel Gacon in southern Portugal, after having fled from the Spanish Inquisition.
1488	Chaves	Unknown	According to the German scholar Horch the *Sacramental* is the first book printed in Portuguese, and not Ludolphus de Saxonia's *Livro de Vita Christi* of 1495 as previously assumed.
1489	Lisbon	Rabbi Zorba, Raban Eliezer	Eliezer Toledano's Hebrew press was active with his foreman Judah Gedalia from 1489 until the expulsion in 1497

1492	Leiria		
1494	Braga		
1536	Coimbra		
1571	Viseu		
1583	Angra do Heroísmo, Azores		
1622	Porto		

Croatia

Date	City	Printer	Comment
1483	Kosinj, Lika		The Printing house of Kosinj [hr] is known for producing the Missale Romanum Glagolitice on February 22nd 1483. The Croatian text known as "Misal po zakonu rimskoga dvora" was significant as it is the first missal in Europe which was not printed in Latin script; only 28 years after the Gutenberg bible.
1494	Senj	Blaž Baromić	Blaž Baromić with his co-workers established printing house in Senj based on glagolitic script. Their first work was the Breviary of Senj.
1530	Rijeka	Šimun Kožičić Benja	

Serbia and Montenegro

Date	City	Printer	Comment
1493–94	Cetinje	Đurađ IV Crnojević, Makarije	Đurađ IV Crnojević used the printing press brought to Cetinje by his father Ivan I Crnojević to print the first books in southeastern Europe, in 1493. The Crnojević printing press operated from 1493 through 1496, turning out religious books of which five have been preserved: *Oktoih prvoglasnik*, *Oktoih petoglasnik*, *Psaltir*, *Molitvenik* and *Četvorojevanđelje* (t he first Bible in Serbian language). Đurađ managed the printing of the books, wrote prefaces and afterwords, and developed sophisticated tables of Psalms with the lunar calendar. The books from the Crnojević press

			were printed in two colors, red and black, and were richly ornamented. They served as models for many of the subsequent books printed in Cyrillic.
1537	village Vrutci of Rujno Župa near Užice	hieromonk Teodosije	*The Rujan Four Gospels* of the Rujno Monastery printing house
1552	Belgrade	Trojan Gundulić	*Četvorojevanđelje*, *Serbulje*

By 1500, the cut-off point for incunabula, 236 towns in Europe had presses, and it is estimated that twenty million books had been printed for a European population of perhaps seventy million.

Scotland

Date	City	Printer	Comment
1507 (the earliest surviving item is dated 4 April 1508)	Edinburgh	Walter Chepman and Androw Myllar	William Elphinstone, the Bishop of Aberdeen, was anxious to get a breviary published (see Aberdeen Breviary), and petitioned King James IV to have a printing press set up. Myllar had previously been involved with printing in France, where Scots authors had traditionally had their books printed (see Auld Alliance). The earliest works were mainly small books (approximately 15 cm), but at least one book was printed in folio format, Blind Harry's *The Wallace*.
1552	St Andrews	John Scot	
1571	Stirling	Robert Lekprevik	
1622	Aberdeen	Edward Raban	
1638	Glasgow	George Anderson	
1651	Leith	Evan Tyler	
1685	Campbeltown	*unknown printer*	

1694	Maybole	*unknown printer*	

Romania

Date	City	Printer	Comment
1508	Târgoviște	Hieromonk Makarije	Macarie is brought into Wallachia by the prince Radu cel Mare. The first printed book in Romania is made in 1508, *Liturghierul*. *Octoihul* is also printed in 1510, and *Evangheliarul* is printed in 1512
1534	Brașov	Johannes Honterus	At the time, the city was a part of the Eastern Hungarian Kingdom.
1545	Târgoviște	Dimitrije Ljubavić	Mostly religious books are printed, among them being Molitvenik. Books printed in Wallachia were also reprinted for use in Moldavia, which at the time did not have its own press.
1550	Klausenburg (Cluj-Napoca)		At the time, the city was a part of the Eastern Hungarian Kingdom.
1561	Brașov	Coresi	*Întrebare creştinească (Catehismul)*

Greece

Date	City	Printer	Comment
1515	Saloniki		
1817	Corfu		

Lithuania and Belarus

Date	City	Printer	Comment
1522	Vilnius	Francysk Skaryna	*The Little Traveller's Book*
1553	Brest	Bernard Wojewódka	Catechism

Iceland

Date	City	Printer	Comment
ca. 1530	Holar	Jon Matthiasson (Swede)	Press imported on the initiative of Bishop Jon Arason. First known local print is the Latin songbook *Breviarium Holense* of 1534.

Norway

Date	City	Printer	Comment
mid-16th century	Trondheim		
1644	Oslo		

Ireland

Date	City	Printer	Comment
1551	Dublin	Humphrey Powell	The first book printed was the *Book of Common Prayer*.

Russia

Date	City	Printer	Comment
1553–54	Moscow	Unknown	According to recent research, the Gospel Book and six others published then.
1564	Moscow	Ivan Fyodorov (printer)	*Acts of the Apostles* (*Apostol*) is the first dated book printed in Russia.
1711	Saint Petersburg		
1815	Astrakhan		

Until the reign of Peter the Great printing in Russia remained confined to the print office established by Fedorov in Moscow. In the 18th century, annual printing output gradually rose from 147 titles in 1724 to 435 (1787), but remained constrained by state censorship and widespread illiteracy.

Latvia

Date	City	Printer	Comment
1588	Riga	Nikolaus Mollin	

Ukraine

Date	City	Printer	Comment
1574	Lviv	Ivan Fedorov	Apostol (the Acts and Epistles in Slavonic)
1593	Lviv		

Wales

Date	City	Printer	Comment
1587	Llandudno	Roger Thackwell	*Y Drych Cristianogawl* ("The Christian Mirror"). Printed covertly in a cave on the Little Orme.

Estonia

Date	City	Printer	Comment
1632	Tartu	Jacobus Pistorius (Jacob Becker)	PostOrdnung (28.09.1632) was the first document printed in Tartu with date and printer's name. The printing press operated in connection with Tartu University (Academia Gustaviana) that was opened on the same year. The reverse side of the document contains a resolution of Johan Skytte about Academia Gustaviana.

Finland

Date	City	Printer	Comment
1642	Turku	Peder Walde, Swedish	The print shop was set up at The Royal Academy of Turku which was the first university (created in 1640) in what is now Finland.

Georgia

Date	City	Printer	Comment
1709	Tbilisi	Mihail Ishtvanovitch	Established by the decree of Vakhtang VI in Abanotubani, Tbilisi

The first books printed in Georgian were *Alphabetum Ibericum sive Georgianum cum Oratione* and *Dittionario giorgiano e italiano* published in Rome in 1629.

Armenia

Date	City	Printer	Comment
1771	Vagharshapat	St. Grigor Lusavorich, Simeon Yerevantsi (Catholicos of Armenia)	The first published book in Etchmiadzin was titled *Սաղմոսարան* (Psalms). The printing house was St. Grigor Lusavorich.

The first book which had Armenian letters was published in Mainz (Germany) in 1486. The first Armenian book to be published by the printing press was *Urbatagirq*—Book of Friday prayers—which was published by Hakob Meghapart in Venice in 1512.

Greenland

Date	City	Printer	Comment
1860	Godthaab		

Latin America

Mexico

Date	City	Printer	Comment
1539	Mexico City	Juan Pablos of Brescia at the House of the First Print Shop in the Americas	Established by the archbishop Juan de Zumárraga, using Hans Cromberger from Seville, the first book printed was *Breve y Mas Compendiosa Doctrina Christina*, written in both Spanish and native Nahuatl. Esteban Martín of Mexico City has been determined to be the first printer in the Western Hemisphere. Between 1539 and 1600 presses produced 300 editions, and in the following century 2,007 editions were printed. In the 16th century, more than 31% of locally produced imprints were in native Indian languages, mostly religious texts and grammars or vocabularies of Amerindian languages. In the 17th century, this rate dropped to 3% of total output.
1640	Puebla		

Peru

Date	City	Printer	Comment
1581	Lima	Antonio Ricardo	Presses produced 1,106 titles between 1584 and 1699.

Guatemala

Date	City	Printer	Comment
1660	Guatemala City		The first book is *Un tratado sobre el cultivo del añil*, which, not coincidentally, was printed in blue ink.

Paraguay

Date	City	Printer	Comment
1700	Jesuit mission of Paraguay		Established with local materials by local Guaraní workers who had converted to Christianity.[72]

Cuba

Date	City	Printer	Comment
1707	Havana		

Colombia

Date	City	Printer	Comment
1736	Bogotá		

Ecuador

Date	City	Printer	Comment
1759	Quito		

Chile

Date	City	Printer	Comment
1776	Santiago		Press functioned only briefly.[72] In 1812 permanently established.
1810	Valparaíso		

Argentina

Date	City	Printer	Comment
1780	Buenos Aires		

Puerto Rico

Date	City	Printer	Comment
1806			

Uruguay

Date	City	Printer	Comment
1807	Montevideo		

Brazil

Date	City	Printer	Comment
1808	Rio de Janeiro		

Venezuela

Date	City	Printer	Comment
1808	Caracas		

Africa

Date	City	Country	Printer	Comment
1516	Fez	Morocco	Jewish	Refugees who had worked for the printer Rabbi Eliezer Toledano in Lisbon
1557	Cairo	Egypt	Gershom ben Eliezer Soncino	First printing press in the Middle East, known only from two fragments discovered in the Cairo Geniza.
As early as the 16th century		Mozambique	Portuguese	
	Luanda	Angola	Portuguese	

	Malindi	Kenya	Portuguese	
1795	Cape Town	South Africa	Johann Christian Ritter German	*Almanach voor't jaar 1796*. The possibility of printing may be as early as 1784 when Ritter arrived in the Cape but no earlier output has surfaced. Ritter is also said to have printed Almanacs for 1795 to 1797 suggesting a start to printing of 1794.
1798	Cairo	Egypt	French	
c.1825		Madagascar	English	Malagasy translation of the *Assembly's Shorter Catechism*
1831	Grahamstown	South Africa		*Grahamstown Journal*
1833		Mauritius		
1841	Pietermaritzburg	South Africa		*Ivangeli e li yincucli, e li baliweyo G'Umatu*
1841	Umlazi	South Africa		*Incuadi yokuqala yabafundayo*
1856	Bloemfontein	South Africa		*Orange Vrystaad A.B.C. spel en leesboek*
1855	Scheppmansdorf (now: Rooibank)	Namibia	Franz Heinrich Kleinschmidt	On 29 June 1855, Protestant missionary Kleinschmidt published 300 copies of Luther's catechism in the Nama language which represent the first printed works in that tongue. Political unrest seems to have prevented further printing activities. The press was reported as being functional as late as 1868, but whether printing was resumed is unknown.
1863	Massawa	Eritrea	Lorenzo Biancheri	An Italian Lazarist missionary set up the first printing press in Ethiopia to print missionary texts

				in Amharic. Biancheri called himself "Printer to His Majesty Emperor Theodros", but there is no evidence he had an imperial appointment. He died in 1864 and his press did not outlive him.[91]
1870s		Malawi		
1892	Salisbury	Southern Rhodesia (now: Zimbabwe)		*Rhodesia Herald* in print, may have started earlier
1901	Harar	Ethiopia		Fifth press in the Ethiopian Empire, but the first in what is today Ethiopia. Established by Franciscans, it printed periodicals in French and Amharic. It was later moved to Dire Dawa.

Asia

South Asia

Date	City	Country	Printer	Comment
1556	Goa	Portuguese India	Jesuits	The press was attached to St Paul's college. See Printing in Goa.
1674-75	Bombay	British India	Bhimjee Parikh / Henry Hills	East India Company supplied press, with only a Latin typeface
1712	Tranquebar	Danish India	Danish-Halle/SPCK Mission	
1736	Colombo	Ceylon, Dutch India	Dutch reform Church / Dutch East India Company	Printing in Dutch, Sinhala, and Tamil
1758	Pondicherry	French India	Thomas Arthur, comte de Lally	Captured by the East India Company, and moved to Madras in 1761

1761	Madras	British India	Johann Phillip Fabricius	Printing in Tamil, using the captured Pondicherry press
1772	Madras	British India	Shahamir Shahamirian, Armenian	The first book published here was Այբբենարան (Aybbenaran - Reading Primer) in Armenian.
1777, November	Calcutta	British India	James Augustus Hicky	Publisher of *Hicky's Bengal Gazette*
1778, January	Calcutta	British India	Robert William Kiernander and John Zachariah Kiernander	SPCK Missionaries
Between 1777 and 1779	Hooghly	British India	Charles Wilkins and Nathaniel Brassey Halhed	
1780, November	Calcutta	British India	Barnard Messink and Peter Reed	Publishers of the India Gazette
1792	Bombay	British India		
1800	Serampore	Danish India	Baptist Missionary Society	Printing Bibles and books in several Indian languages
1848	Lahore	British India	Syed Muhammad Azeem	Lahore Chronicle Press, located in the old Naulakha palace, and printing in English and Farsi (Persian)

Ottoman Empire

Date	City	Printer	Comment
Dec 13th, 1493	Constantinople	David and Samuel ibn Nahmias, Hebrew	First ever printed book in Ottoman Empire was Arba'ah Turim in Hebrew. Some argue the year and suggest 1503 or 1504.
1519—1523	the Church of Saint George in Sopotnica, Sanjak of Herzegovina, Ottoman	Božidar Goraždanin	hieratikon (1519), psalter (1521) and a small euchologion (1523)

	Empire (today village in Novo Goražde, Republic of Srpska, Bosnia and Herzegovina). The books were printed in Church Slavonic of the Serbian recension.		
1554	Bursa		
1567	Constantinople	Apkar Tebir, Armenian	The first book printed here was Փոքր քերականութիւն (Poqr Qerakanutyun - Brief Armenian Grammar) in Armenian
1577	Safed	Eliezer and Abraham ben Isaac Ashkenazi (apparently no relation)	First printing press in Western Asia, publishing in Hebrew. Eliezer, a native of Prague, operated in Lublin and Constantinople before settling in Safed. First printed *Lekach Tov*, a commentary on the Book of Esther by 18 year old Yom Tov Tzahalon.
1584	St. Anthony's Monastery, Qozhaya, Lebanon		Introduced by Maronite Patriarch Sergius ar-Rezzi; psalter was printed the first time in 1585
1610	St. Anthony's Monastery, Qozhaya, Lebanon		Second printing press set up by Christian Maronites in Lebanon; printed both Syriac and Arabic in Syriac script
1627-28	Istanbul	Nicodemus Metaxas	First printing press of Greek books in Ott.Empire. Closed down by the authorities in 1628
1706	Aleppo	Athanasius Dabbas	First press for printing in the Arabic script in the Ottoman Empire; operated until 1711. Funded by Constantin Brâncoveanu and established with the assistance of Anthim the Iberian
1729[98]	Constantinople	Ibrahim Muteferrika	First press for printing in the Arabic script established by Muslims in the Ottoman Empire, against opposition from the calligraphers

			and parts of the Ulama. It operated until 1742, producing altogether seventeen works, all of which were concerned with non-religious, utilitarian matters.
1734	Monastery of St. John of Choueir, Khenchara, Lebanon	‘Abd Allāh Zākhir	
1759	Smyrna (Izmir)	Markos, Armenian	
1779[100]	Constantinople	James Mario Matra (Briton)	Abortive attempt to revive printing in the Ottoman lands

According to some sources, Sultan Bayezid II and successors prohibited printing in Arabic script in the Ottoman empire from 1483 on penalty of death, but printing in other scripts was done by Jews as well as the Greek, Armenian, and other Christian communities (1515 Saloniki, 1554 Bursa (Adrianople), 1552 Belgrade, 1658 Smyrna). Arabic-script printing by non-Muslims in the Ottoman Empire began with the press of Athanasius Dabbas in Aleppo in 1706. In 1727, Sultan Achmed III gave his permission for the establishment of the first legal print house for printing secular works by Muslims in Arabic script (Islamic religious publications still remained forbidden) but printing activities did not really take off until the 19th century.

Southeast Asia

Date	City	Country	Printer	Comment
1590	Manila	Philippines		
1668	Batavia	Indonesia		
1818	Sumatra Island	Indonesia		

East Asia

Date	City	Country	Printer	Comment
1590	Nagasaki	Japan	Alessandro Valignano	The Jesuits in Nagasaki established *The Jesuit Mission Press in Japan* and printed a number of books in romanised Japanese language.
1833	Macao	China		The first presses were imported by Western priests for their missionary work from Europe and America. The earliest known, an albion press, was set up in the Portuguese colony Macao and later moved to Canton and Ningbo.

1883	Seoul	Korea	Inoue Kakugoro (Japanese)	The first printing press was imported from Japan for publishing Korea's first Korean-language newspaper *Hansong Sunbo*. After the press was destroyed by conservatives, Inoue returned with a new one from Japan, reviving the paper as a weekly under the name *Hansong Chubo*. Presses were also established in Seoul in 1885, 1888 and 1891 by Western missionaries. However, the earliest printing press was apparently introduced by the Japanese in the treaty port of Pusan in 1881 to publish Korea's first newspaper, the bilingual *Chosen shinpo*.

Iran

Date	City	Country	Printer	Comment
1636	New Julfa, Isfahan	Persia	Khachatur Kesaratsi, Armenian	The first book printed here was Սաղմոս ի Դավիթ (Saghmos i Davit - Psalter) in Armenian
1820	Tehran	Persia		
1817	Tabriz	Persia	Zain al-Abidin Tabrizi (?)	

United States and Canada

Date	City	Country	Printer	Comment
1638	Cambridge, Massachusetts	USA	Stephen Daye, Samuel Green (from 1649)	This printing shop was located in the home of the first president of Harvard College, Henry Dunster. It printed the first Bible in British North America in 1663, in English as well as Algonquian.
1682	Jamestown, Virginia	USA		
1685	Philadelphia	USA	William Bradford	
1685	St. Mary's City, Maryland	USA		William and Dinah Nuthead started a press in Annapolis in 1686

1693	New York	USA	William Bradford	
1731	Charleston, South Carolina	USA		
1735	Germantown	USA	Christoph Sauer	
1749	New Bern, North Carolina	USA		
1752	Halifax	Canada	John Bushell	The *Halifax Gazette*, Canada's first newspaper was published initially in this year.
1761	Wilmington, Delaware	USA		
1762	Savannah, Georgia	USA		
1764	New Orleans, Louisiana	Spanish Louisiana (later USA)		
1783	St. Augustine, Florida	La Florida (New Spain) (later USA)		
1787	Lexington, Kentucky	USA		
1791	Rogersville, Tennessee	USA		
1828	New Echota, Arkansas	USA	Elias Boudinot (Cherokee)	Boudinot published the *Cherokee Phoenix* as first newspaper of the tribe.
1833	Monterey, California	Mexico (later USA)		
1834	Santa Fe	Mexico (later USA)		

1846	San Francisco	USA		
1853	Oregon	USA		
1858	Vancouver Island	Canada		

Australia and Oceania

Date	City	Country	Printer	Comment
1795	?	Australia	George Hughes	
1802	Sydney	Australia	George Howe	
1818	Hobart, Tasmania	Australia		
1818	Tahiti	French Polynesia		
1821	Hawaii	Kingdom of Hawaii		
1835	Paihia	New Zealand	William Colenso	The first book was a Maori translation of part of the Bible commissioned by the Church Missionary Society: "Ko nga Pukapuka o Paora te Apotoro ki te Hunga o Epeha o Piripai" (The Epistles of St Paul to the Philippians and the Ephesians).
1836	Maui	Kingdom of Hawaii		

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American Printing History Association

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https://printinghistory.org/timeline/

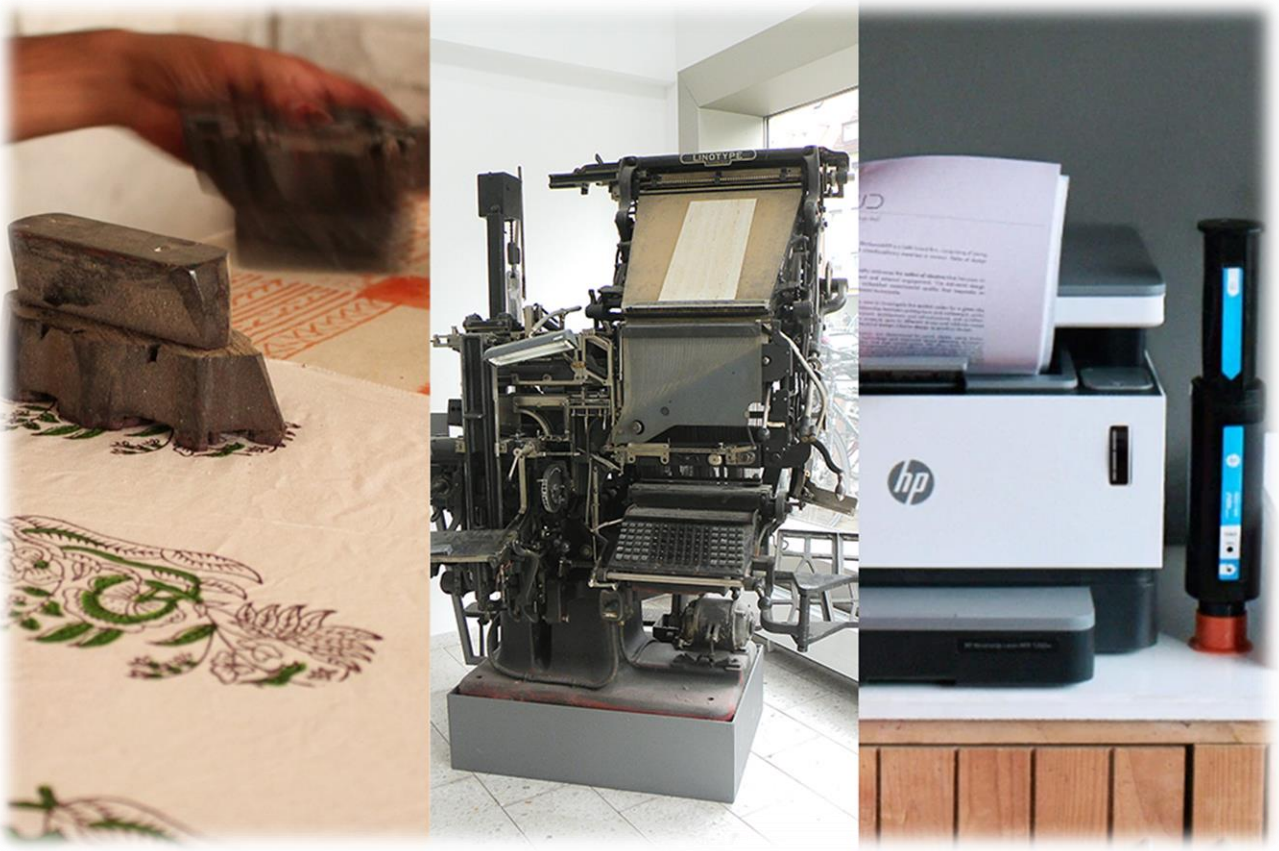
History of Printing

Timeline

https://www.printxpand.com/blog/printing-technology-history-timeline/

Timeline of the Printing Industry:

6th Century - Till Date



"Before printing was discovered, a century was equal to a thousand years", said Henry David Thoreau, an American essayist, poet, and philosopher. This quote is enough to prove the worth of the print industry.

The printing industry has metamorphosed over the past few centuries to eventually attain its current form. Printing industry trends have never been constant and kept changing from time to time.

So, in this blog, you would discover the journey of the printing industry starting from the 6th century till date and explain the various developments this industry witnessed.

- **Woodblock Printing (6th Century – Early 9th Century)**

The Tang Dynasty ruled China during this period. You can call this dynasty the trailblazer of the modern-day printing industry. Woodblock printing was the major innovation of this empire. In this kind of printing, people would engrave wooden blocks, ink them and then press them on a sheet of paper to print images, texts or patterns.

This innovation proved to be a milestone in modern-day Chinese historiography. People consider it as one of the four major inventions of the ancient Chinese empire – the other three being papermaking, gunpowder, and the compass.

Historians also attribute the advent of the oldest known printed book – ***Diamond Sutra*** to this age. This Buddhist Sutra was a 16-feet long woodblock-printed scroll.

- **Cast Metal Movable Type Printing (12th Century)**

In around 1241, Korea invented cast metal movable type printing. They printed the popular Korean classic ***Yi Munsun Chip*** using this method of printing. This Korean classic was an 8-volume collection of works by Yi Munsun, a great scholar, poet and statesman during the Koryo Dynasty of Korea.

- **Wooden Movable Type Printing (13th Century)**

By now, the printing technology had started spreading from Asia to other continents as well.
The 13th century witnessed several important stages in the evolution of the printing technology as follows:

- **1300**
  Bi Shen, the Chinese inventor developed the wooden movable clay type printing back in 1041 AD. But Chinese soon abandoned this technology shortly after he invented it. The drawback was that the clay blocks would break easily.
  Around 1.5 centuries later in 1300, Wang Zhen, a Chinese mechanical engineer, writer, inventor, and government official reinforced this technology. He replaced the movable clay types with wooden blocks. This innovation boosted the speed of typesetting as well.

- **1309**
  Europeans made it big in printing technology by making the first paper.
  Again, opinions differ with some historians tracing the origin of the first ever paper back to the 2nd century in China, but there is no strong evidence.

- **1330 – 1395**
  The printing industry witnessed two landmarks in the printing history in the form of the establishment of the paper mills in two European countries:

  – In France in 1348
  – In Germany in around 1390

- **Metal Movable Type Printing and Gutenberg Printing Press (14th Century)**

The block printing technology soon spread to the European continent. Europeans started printing books using block printing. However, printing hadn't witnessed any big revolution until 1440 when Johannes Gutenberg, a German blacksmith made history. During his political exile away from Mainz, Germany in Strasbourg, France; he started experimenting with printing using metal types. He returned to Mainz in 1450 and introduced a commercial printing machine – ***Gutenberg Press***.

The first book that he produced was a 1300-page ***Gutenberg Bible*** in 1452 in collaboration with Johannes Fust who funded his printing project. They printed around 180 copies of the Gutenberg Bible that circulated well. They started printing pamphlets, calendars, and other ephemera then onwards.

Later in 1455, they parted ways due to a lawsuit that Fust filed against Gutenberg. The ruling was in favor of Fust and he got to acquire all of the Gutenberg equipment and partnered with Peter Schoffer of Gernsheim, Germany.
Gutenberg continued printing alone for several years until 1460 when he finally gave up printing. Possibly due to his old age and visual impairment. He finally passed away in Feb. 1968.

Schroffer was a former calligrapher and technically better at typography and printing (as historians claim). Within two years of his partnership with Fust, he published the ***Book of Psalms***, the first ever book with a three-colored title page and multi-color types within.

Soon after, the other European countries also welcomed the Gutenberg's invention. By 1470, Italy started using the Gutenberg Press and made huge profits in printed matter. Soon after, the French set up the printing press at Sorbonne, the University of Paris in 1470. By 1476, German printers had become big fishes in the printing business.

Following the rage/fashion, the two other European countries – Spain and Portugal embraced the Gutenberg Printing Press in 1473 and 1495 respectively.

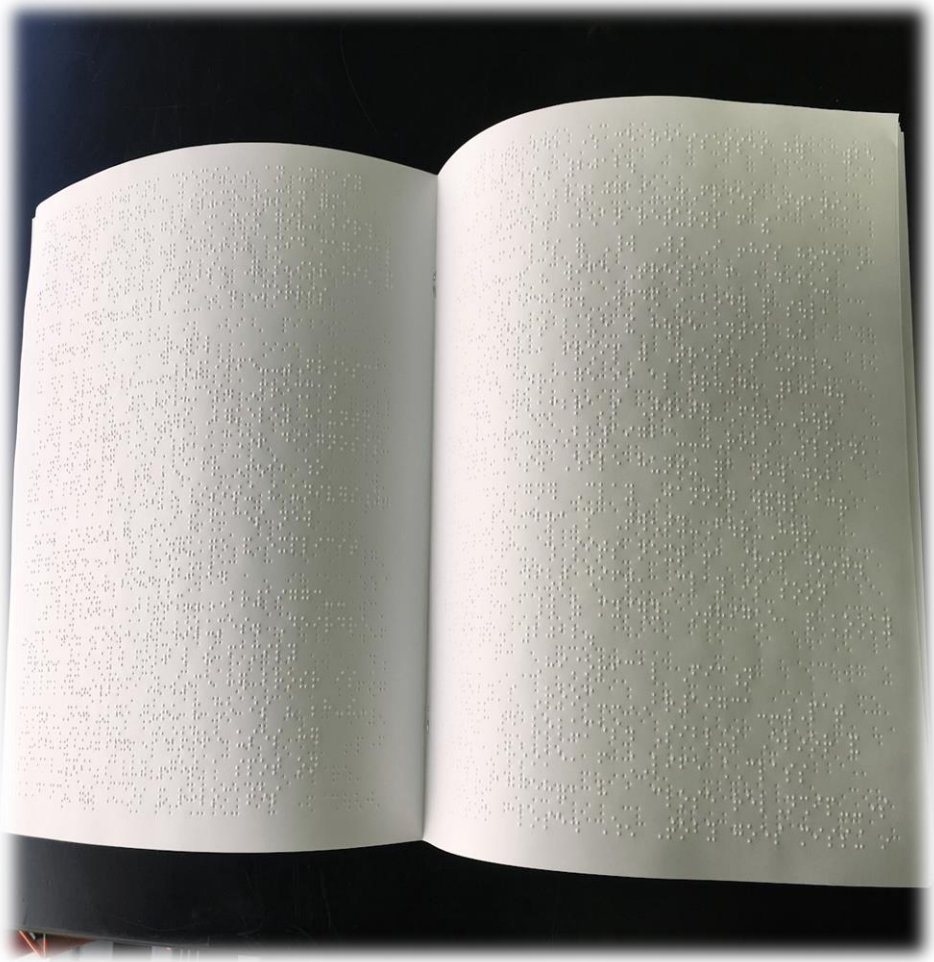
The landmark event of this century was the introduction of the Gutenberg Press to England by William Caxton, an English merchant, writer, and diplomat. In 1495, England set up its first paper mill.

Meanwhile, in contemporary Asia, Hua Sui invented the first metal movable type printing during the Ming Dynasty. He was a wealthy Chinese scholar and printer. Some historians argue that Koreans had already discovered metal (bronze) movable type printing in the 13th century only, but there is no concrete evidence to prove that Hua Sui took inspiration from Koreans.

- **Pre-Industrial Age Printing (15th Century – Early 18th Century)**

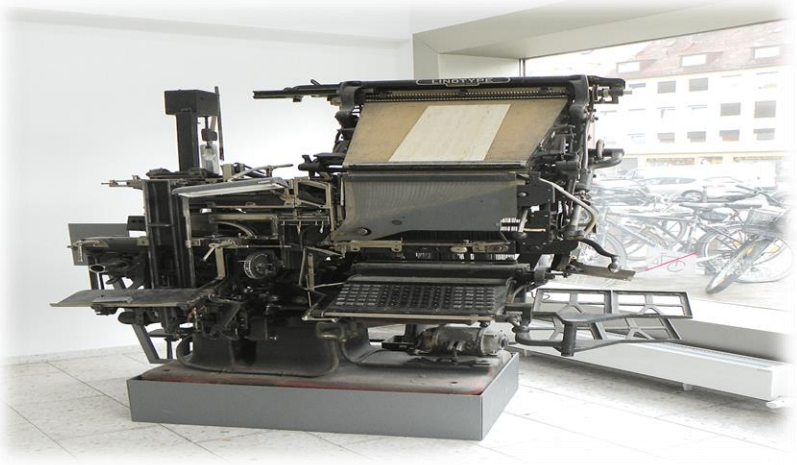
The seeds of the full-fledged industrial age printing were sown during this period.
Printing witnessed umpteen changes. Enumerating every change may go very long. However, I am trying to sum up the major changes during this period.
– 1550 – England introduced its first ever wallpaper.
– 1575 – North America established its first ever paper mill in Mexico in the present-day North America.
– 1611 – England published the English version of the Bible (translated from the original Hebrew and Greek languages) under King James I. Later, it became popular as the King James Bible.
– 1690 – The present-day United States established its first ever paper mill in Philadelphia.
– 1702 – Daily Courant, the first English newspaper commenced in Fleet Street in London.
– 1725 – William Ged, a Scottish goldsmith, invented stereotyping.

– 1800 – Lord Charles Stanhope, a British diplomat, and scientist, invented the cast iron printing
press.
– 1819 – Napier invented the rotary printing press.
– 1829 – Louis Braille, a French educator, and Catholic priest, invented embossed printing for the visually impaired.



- **Industrial Age Printing (Mid 18th Century – Mid 19th Century)**

By around mid-18th century, industrial age printing had eventually set in. Let's walk you through major milestones in printing during this age.
– 1846 – Richard March Hoe, an inventor from New York, US, developed an improved version of the Napier's rotary printing press. This press could print 8000 sheets an hour and bagged recognition as the first commercial printing press for large print jobs.
– 1865 – Though Hoe's printing press was a great innovation, its fragility was a drawback. The other major drawback was manual feeding of the paper.
– William Bullock, an American inventor tweaked the design to make it efficient and better.
– He invented the automated roll-fed rotary printing press. This press had the capacity to print 12000 newspapers an hour.
– 1875 – The modern-day offset printing dates back to this year. Robert Barclay, a Scottish writer, and inventor developed the first-ever offset lithography printing press.
– 1886 – A German inventor Ottmar Mergenthaler invented the Linotype machine, the first-ever typesetting machine. This became the first linotype machine to publish the '***New York Tribune***', the then popular daily newspaper of New York.



– 1870 – Wood pulp became a great raw material for mass paper production.
– 1907 – Cašpar Hermann, a US immigrant from Germany, developed the first web offset printing press.
– 1938 – Chester Carlson, an American physicist, and inventor became the father of modern-day photocopying. It was a dry printing process named electrophotography (which people commonly call 'Xerox' today).

- **Pre-Digital Age Printing / Early Age Digital Printing (Laser Printing) (Mid 19th Century – Late 19th Century)**

Digital printing was around the corner. Several harbingers of the full-fledged digital printing (including the modern-age 3-D printing) were:
– 1954 – Xerox introduced Copyflo, the first automatic Xerographic printer.
– 1968 – Epson (formerly Seiko Group), a Japanese electronics manufacturing company entered the printer-manufacturing business. It launched EP-101, the world's first mini-printer. This invention led to the foundation of a leading computer printer manufacturing company that we recognize as Epson today.
– 1969 – American physicist and inventor Gary Keith Starkweather made the groundbreaking invention in the form of a laser printer while working in his research lab in Xerox. This invention went on to lay the foundation of laser printing technology.

– 1971 – Brother Industries, Ltd. launched the world's first high-speed dot-matrix printer.
– 1975 – Canon Inc. developed its first laser printer.
– 1981 – SATO made a ground-breaking invention in the form of a thermal transfer barcode printer.
– 1984 – Hewlett Packard, a renowned American MNC headquartered in California, US invented HP ThinkJet, the world's first thermal inkjet printer. Later in the same year, HP introduced HP LaserJet, the world's most popular PC laser printer.

- **Modern Age Digital Printing (Late 19th Century – Till Date)**

By now, the advent of 3-D printing had started making buzz.

– 1983 – Charles Hull invented **Stereolithography**, sowing the seeds of 3-D printing.
– 1985 – Canon Inc. introduced BJ 80, the world's first inkjet printer to use Bubble Jet technology.
– 1986 – Charles Hull co-founded the present-day 3D Systems, a computer manufacturing MNC based in South Carolina, USA. This company became the world's first 3-D printing company.
– 1991 – HP brought about the color printing revolution by launching the affordable HP DeskJet 500C.
– 1993 – Canon Inc. introduced Pixel Jet S, a full-colour photocopying machine.
– 1996 – 3D Systems introduced MultiJet 3D printers.
– 2002– Dell Inc. set off its journey as a printer manufacturer and retailer.

– 2003 – Kodak introduces LS633, the world's first OLED display digital camera. It featured the world's first printer-camera combination. In the same year, HP introduced cutting-edge wireless printing technology.

– 2007 – ZINK pioneered inkless printing technology that requires no ink cartridges, toners, or ribbons to print. It introduced one-of-its-kind ZINK paper with all colors for high-quality printing embedded.
– 2009 – HP and BlackBerry formed an alliance that gave BlackBerry users across the world to print emails and docs wirelessly.
– 2010 – HP introduced the world's first web-connected home printer and launched the mobile printing solution. Parallely, Apple Inc. also introduced AirPrint that eliminated the need for printer-specific drivers.
– 2011 – Epson introduced receipt printers with wireless printing capability from any OS.

– 2013 – HP launched the new HP Officejet Pro X that Guinness World Records recognized for the fastest time to print by an office color desktop printer.
– 2019– HP debuted HP Neverstop – the world's first Toner Tank Laser Printer. This printer is 38% faster than the previous generations. With automatic ink sensor alerts, it alerts you before the ink gets over.

Kindly, also visit the Web Link

https://www.pixartprinting.co.uk/blog/brief-history-printing/

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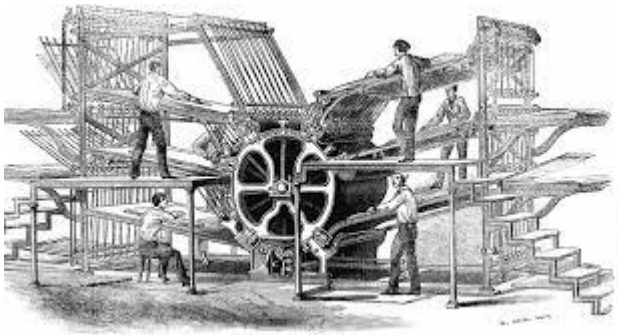

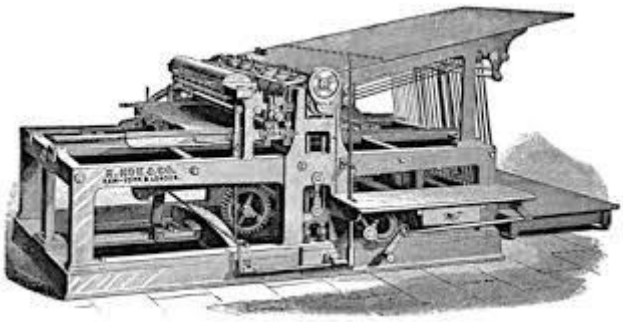


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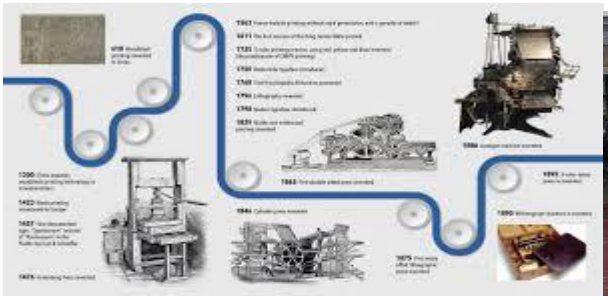


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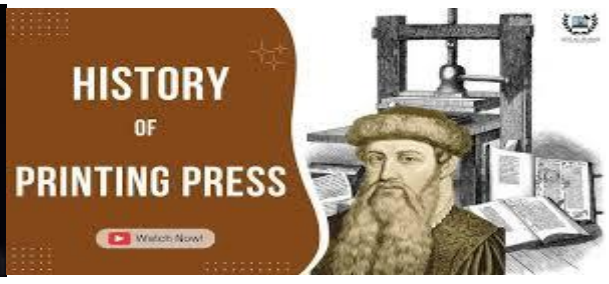
Free Speech and
the Printing Press


DUBHUMANS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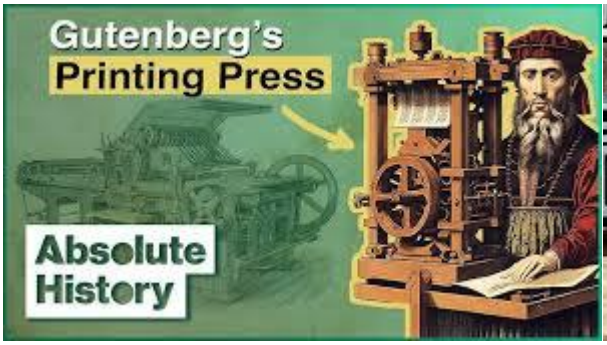

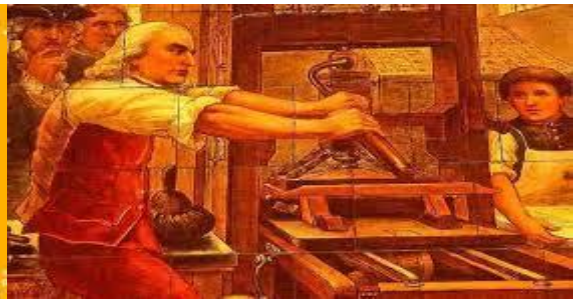

ISBN 978-81-982008-0-4